## Preliminary Data Gap Analysis

## Pebble Project Environmental Impact Statement

Resource: Marine Mammals				
<b>Project Component</b>	Analysis Component	Description	Data Recommendations	
Amakdedori Port	Marine mammals – Environmental Consequences	Specific acoustic information relating to marine construction of planned port facilities is needed to assess potential impacts from	For planned port construction, specific information on the number, type, size, hammer type, etc. for the terminal piles are needed to evaluate effects. We also need to understand the duration for construction over a 24-hour period and over length of project.	
		acoustic harassment (both Level A and Level B) in accordance with both Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA).	An example of the level of detail needed: Construction of the terminal will require installation of 18 steel pipe piles that are 110-ft in length and 48-inches in diameter. The piles are located in approximately 20 feet of water. The piles will be installed using an impact hammer (D180 diesel or similar). The typical strike rate is approximately 38 strikes per minute. It takes approximately 30 minutes per pile. Anticipating an average production rate of 1.5 piles per day, installation of the piles will require about 27 intermittent days of effort in the first year of construction.	
Ferry Terminal - construction	Marine mammals – Environmental Consequences	Acoustic related information is needed to assess effects from acoustic harassment (both Level A and Level B) in accordance with MMPA for harbor seals.	Ferry terminal construction details are needed, similar to the Port pile driving request (above).	
Natural Gas Pipeline  – Iliamna Lake and Cook Inlet	Marine mammals – Environmental Consequences	Acoustic related information is needed to assess potential impacts	Please provide information on pipe laying details to include vessel type, number of tugs, and estimated duration of activity.	

from acoustic harassment	
(both Level A and Level B)	
in accordance with both	
MMPA and ESA.	

## **Data Reviewed**

- USACE Application for permit project description and maps/diagrams in Attachments 4 and 6
   Pebble Project Environmental Baseline Documents, Chapters 44 and 45.
   Chuitna Coal PSEIS.

## GIS Layers Needed

1. Specific locations of where piles may be driven for port and ferry terminal construction, if this level of detail is known.